CLEAN COPY OF AMENDED CLAIMS

30. (new) A coated reaction chamber comprising

a reaction chamber;

an inner wall of the reaction chamber;

a standard coating disposed on the inner wall of the reaction chamber immediately with native, synthetically or enzymatically prepared standard nucleic acids, wherein the standard coating is performed non-covalently with a mixture of calibrated nucleic acids, the standard nucleic acids and carrier nucleic acids at the surface of the inner walls of the reaction chambers, which inner walls of the reaction chambers do not require any chemical nor biochemical modification prior to the coating.

- 31. (new) The coated reaction chamber according to claim 30, wherein the reaction chamber comprises glass or plastic vessels or glass capillaries.
- 32. (new) The coated reaction chamber according to claim 30, wherein the standard nucleic acids include a member of the group consisting of

DNA, RNA, synthetic equivalents of DNA and/or RNA, as well as dU-containing DNA.

- 33. (new) The coated reaction chamber according to claim 30, wherein the standard nucleic acids comprise
- a) a DNA solution is used comprising a minimum sequence homology to the nucleic acid compound to be analyzed for a dilution of DNA standards, and
- b) a tRNA solution is used for a dilution of the RNA standards.
- 34.(new) The coated reaction chamber according to claim 30, wherein said carrier nucleic acid is a DNA of the lambda phage, which carrier nucleic acid is converted into readily soluble fragments of a mean length of about 1 2 kb by means of ultrasonic treatment.